What is claimed is:

1. A method of inspecting a printed paper on which images are printed repeatedly, the method comprising the steps of:

reading multi level data of reference of each of colors from a printed paper on which images are printed to be good, the multi level data of reference being converted into two level data of reference so that two level images of reference can be reproduced in a memory from the two level data of reference;

reading multi level data of inspection of each of colors from a printed paper which is fed when inspecting, the multi level data of inspection being converted into two level data of inspection so that two level images of inspection can be reproduced in the memory from the two level data of inspection; and

comparing the two level images of inspection with the two level images of reference for inspection of stained parts and blurred parts.

2. The method as set forth in claim 1 wherein the step of comparing includes the step of partitioning the two level images of reference and the two level images of inspection into parts to compare the two level images of inspection with the two level images of reference at every part.

3. The method as set forth in claim 1 or 2 further comprising the steps of:

predetermining areas for decision of stained parts or blurred parts; and

deciding on stained parts or blurred parts when the two level images of inspection include portions disagreeing with the two level images of reference and the portions have areas exceeding the areas for decision of stained parts or blurred parts.

4. The method as set forth in claim 3 further comprising th step of

g nerating an alarm of stained parts or blurred parts wh n finding out the stained parts or blurred parts.

5. The method as set forth in claim 1 further comprising the step of detecting the positional variations of the printed paper at every page when the printed paper is fed, to compensate the two level images reproduced in the memory for the positional variations.

6. The method as set forth in claim 1 further comprising the steps of:

predetermining a threshold of lowest stained density near a level of lowest printed density for inspection of stained parts; and

predetermining a threshold of highest blurred density near a level of highest printed density for inspection of blurred parts, the multi level data of reference and the multi level data of inspection being converted into the two level data of reference and the two level data of inspection by using the thresholds of lowest stained density and highest blurred density.

7. The method as set forth in claim 6 further comprising the steps of:

predetermining a limit of minus of differential density independently of the threshold of lowest stained density for inspection of shortage of printed density at every pixel;

predetermining a limit of plus of differential density independently of the threshold of highest blurred density for inspection of excess of printed density at every pixel;

predetermining areas for decision of shortage or excess of printed density;

comparing the multi level data of inspection with the multi level data of reference at every pixel for recognition of difference between the multi level data of reference and the multi level data of inspection; and

deciding on shortage or excess of printed density when the difference exceeds the limit of minus of diff rential density or plus of

differential density by portions having areas which exce d the areas for decision of shortage or excess of printed density.

8. The method as set forth in claim 7 further comprising the step of generating an alarm of shortage or excess of printed density when finding out the shortage or excess of printed density.

9. A method of inspecting a printed paper on which images are printed repeatedly, the method comprising the steps of:

predetermining a limit of lowest stained density near a level of lowest printed density for inspection of stained parts, the limit of lowest stained density being disposed above the level of lowest printed density;

predetermining a limit of highest blurred density near a level of highest printed density for inspection of blurred parts, the limit of highest blurred density being disposed below the level of highest printed density;

predetermining a limit of minus of differential density independently of the limit of lowest stained density for inspection of shortage of printed density, the limit of minus of differential density being disposed above the limit of lowest stained density;

predetermining a limit of plus of differential density independently of the limit of highest blurred density for inspection of excess of printed density, the limit of plus of differential density being disposed below the limit of highest blurred density;

reading multi level data of reference of each of colors from a printed paper on which images are printed to be good;

reading multi level data of inspection of each of colors from a printed paper which is fed when inspecting;

using the multi level data of reference, the multi level data of inspection, the limit of lowest stained density and the limit of highest blurred density for inspection of stained parts or blurred parts; and

using the multi level data of reference, the multi lev l data of inspection, the limit of minus of differential density and the limit of plus of differential density for inspection of shortage or excess of printed density.

10. The method as set forth in claim 9 wherein the limit of lowest stained density comprises a threshold of lowest stained density, the limit of highest blurred density comprising a threshold of highest blurred density, the multi level data of reference being converted into two level data of reference when exceeding the threshold of lowest stained density or highest blurred density, two level images of reference being reproduced in a memory from the two level data of reference, the multi level data of inspection being converted into two level data of inspection when exceeding the threshold of lowest stained density or highest blurred density, two level images of inspection being reproduced in the memory from the two level data of inspection, to compare the two level images of inspection with the two level images of reference for inspection of stained parts or blurred parts.

11. The method as set forth in claim 10 further comprising the step of comparing the multi level data of inspection with the multi level data of reference at every pixel for inspection of shortage or excess of printed density.

12. An apparatus for inspecting a printed paper on which images are printed repeatedly, the apparatus comprising:

data reading means for reading multi level data of reference of each of colors from a printed paper on which images are printed to be good, and reading multi level data of inspection of each of colors from a printed paper which is fed when inspecting;

data processing means by which the multi level data of reference are converted into two level data of reference, the multi lev l data of inspection being converted into two level data of inspection by the data

proc ssing means;

a memory in which two level images of reference are reproduced from the two level data of reference, two level images of inspection being reproduced in the memory from the two level data of inspection; and

comparing means for comparing the two level images of inspection with the two level images of reference for inspection of stained parts and blurred parts.

13. The apparatus as set forth in claim 12 wherein the comparing means is arranged to partition the two level images of reference and the two level images of inspection into parts to compare the two level images of inspection with the two level images of reference at every part.

14. The apparatus as set forth in claim 12 or 13 further comprising:

predetermining means for predetermining areas for decision of stained parts or blurred parts; and

deciding means for deciding on stained parts or blurred parts when the two level images of inspection include portions disagreeing with the two level images of reference and the portions have areas exceeding the areas for decision of stained parts or blurred parts.

15. The apparatus as set forth in claim 14 further comprising alarm means for generating an alarm of stained parts or blurred parts when finding out the stained parts or blurred parts.

16. The apparatus as set forth in claim 12 further comprising predetermining means for predetermining a threshold of lowest stained density near a level of lowest printed density for inspection of stained parts and predetermining a threshold of highest blurred density near a level of highest printed density for inspection of blurred parts, the multi level data of reference and the multi level data of inspection b ing converted into two level data of r f rence and two level data of inspection by using the thresholds of

low st stained d nsity and hlghest blurr d density.

17. The apparatus as set forth in claim 16 further comprlsing:

predetermining means for predetermlning a llmit of mlnus of differentlal density lndependently of the threshold of lowest stained density for inspection of shortage of prlnted density and predetermining a llmit of plus of differential density lndependently of the threshold of highest blurred density for inspection of excess of printed density;

predetermlning means for predetermining areas for decision of shortage or excess of printed density;

comparing means for comparing the multi level data of inspection with the multi level data of reference at every pixel for recognition of difference between the multi level data of reference and the multi level data of inspection; and

deciding means for deciding on shortage or excess of printed density when the difference exceeds the llmit of mlnus of differential density or plus of differential density by portions having areas which exceed the areas for decision of shortage or excess of printed density.

18. The apparatus as set forth in claim 17 further comprising an alarm means for generating an alarm of shortage or excess of printed density when finding out the shortage or excess of printed density.